Iawwenda - Manual

Release 0.2.115

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CONTENTS

FIRST STEPS

This application allows browsing a file share. It works a bit like your local file manager. It lists the content of a particular directory (usually starting from its root directory). You can see some details about files, open files, navigate to subdirectories, and more.

The main view is assembled by the following parts:

- **The header bar.** There are two interesting things going on in the header bar:

  - **The 'breadcrumbs'.** It displays the path of the current directory, with each segment clickable for navigating to it. So this is the way to go 'back' to the parent directory or even higher superdirectories.

  - **The main menu.** There is also the main menu button on the right hand side. The main menu provides all kinds of global actions, i.e. actions that are not related to your current file selection.

- **The file list.** The main part of the page lists all files and subdirectories in the current directory.

- **The actions and details panel.** Whenever one or more files are selected in the file list, there is a panel that offers actions on them and shows some detail informations about them.

FILE LIST

Select a file for inspecting details about it in the 'Actions and details panel' or for executing some action on it, like opening it. Navigate to subdirectories by opening them.

Selecting more than one item is possible by clicking on the left part of a row, i.e. where the icon is.

The main menu offers control about the sort order and a few other file list aspects.

THREE

ACTIONS AND DETAILS PANEL

The position of this panel depends on the browser window size. It allows things like opening the selected file, but also more in some situations. It shows some detail information about the file, like its modification time, tags, comments, and more.

For some types of files it will also try to provide a preview. This preview can be enlarged and used for slide shows as well.

FOUR

SEARCH

The main menu offers 'Search' functionalities of various kinds. It will search for files in your current directory (usually including all subdirectories) that match your search query.

The search will automatically happen in background, automatically refreshed while you specify your query. Close the search afterwards in order to get back the usual file list for the current directory.

The file list will not show only the items of the current directory when presenting search results. Instead, it will collect results from all subdirectories as well and merge that together in one line.

KEYBOARD USAGE

Basic usage is possible via keyboard. This includes navigation by arrow keys and some action shortcuts that can be found in their mouse tooltips.

SIX

CONNECT YOUR NATIVE FILE MANAGER VIA WEBDAV

All modern file managers should support connecting to this file share as well, using the WebDAV standard. Just try to navigate to the same file share address with the file manager instead.

In some file managers, the address must start with *webdavs://* or *davs://* instead of *https://*.

Note: Although WebDAV access is a very comfortable alternative to the browser interface in some cases, it does not provide all features. It will probably not show you some file details like tags or comments, file searches will probably have a different behavior, and maybe other things as well.

USER MANUAL

7.1 License

lawwenda is written by Josef Hahn under the terms of the AGPLv3.

Please read the *LICENSE* file from the package and the *Dependencies* section for included third-party stuff.

7.2 About

Lawwenda provides access to a directory in your filesystem by means of a web interface. Users can navigate to it with any modern web browser and see your files.

For real usage (i.e. "production systems") it is hosted in a *wsgi* compatible web server. This is a very common standard for hosting Python web applications and is supported by most widespread web server daemons.

The most noteworthy features are:

- Comfortable web browser interface that lists the files and subdirectories in a directory, shows some details of them, and allows to open (i.e. "download") them; in a similar way to usual desktop file managers.

- Can be either read-only or also with write access, i.e. uploading, renaming, moving, deleting data.

- Can be password protected or not. In the latter case, your web server may put another authentication method around it.

- Supports some "modern" file attributes like a comment, tags, a rating and a geographic position; backed by "extended attributes" on file system level.

- A configuration specifies one or many "shares" (or none), each one potentially pointing to another directory and with an individual setup (incl. individual passwords).

- Shares can have file exclude criteria (path patterns, tags, . . .).

- Shares can have expiration dates.

- User interface works fine on desktop machines and mobile phones.

- Alternatively to the web browser interface, users can connect to a share with a WebDAV client or compatible file manager (modern file managers should be compatible).

- Extensible by plugging in custom Python modules, with a friendly, rich and well documented api.

- Thoroughly designed with security in mind.

7.3 Up-to-date?

Are you currently reading from another source than the homepage? Are you in doubt if that place is up-to-date? If yes, you should visit https://pseudopolis.eu/wiki/pino/projs/lawwenda and check that. You are currently reading the manual for version 0.2.115.

7.4 Maturity

lawwenda is in alpha state.

7.5 Dependencies

There are external parts that are used by lawwenda. Many thanks to the projects and all participants. Some installation methods might handle dependency installation automatically, while others leave that up to you.

Python 3.7, required

werkzeug, required : see here.

Typical GNU/Linux Desktop, recommended

font 'Symbola', included : for logo symbol; free for use; copied from here.

banner image, included : _meta/background.jpg; license CC BY-SA 4.0; by 'Laslovarga', copied from here.

all files in /_meta, included : if not mentioned otherwise, Copyright 2021 Josef Hahn under license CC BY-SA 3.0 license.

7.6 Introduction

Please read how to make Lawwenda ready for the first steps in *Appendix: Installation*.

7.6.1 First Steps

In order to make any use of Lawwenda, it is required to create at least one file share. This can be done by executing this on a terminal:

```
lawwenda_cli add_share myshare /path/that/i/want/to/share
```

This assumes */path/that/i/want/to/share* to be the directory you want to share. *myshare* is the share name and can be chosen freely. It will ask you to choose a password (just leave empty for no password).

Then you need a web server that hosts your Lawwenda installation. If you have skipped this part of *Appendix: Installation*, you can get one by executing this:

```
lawwenda_cli run_dev_server
```

This will print the root address of a tiny local web server that hosts your Lawwenda installation for the moment. It will not answer anything useful, but you need it in the following step in order to access your shares.

> **Warning:** Be aware that starting this server potentially makes data available to parties that should not have access (e.g. if 3rd parties have access to your local network services). In any case, for different reasons, do not use this variant for more than some trying, testing, developing!

If your web server provides your Lawwenda installation at *https://example.com/shares/*, you can access your new *myshare* share at *https://example.com/shares/myshare/*. The base address might be anything, and just the share name has to be appended.

There are some optional parameters that can be specified in a *lawwenda_cli add_share* call. They are a large part of Lawwenda's versatility. Get more details by executing:

```
lawwenda_cli add_share -h
```

Once you have Lawwenda running in a web server and you have added at least one share, you can browse to its share url and start using it. Read the *User Interface Quickstart Guide* for more details about the user interface.

7.7 Appendix: Installation

Install Lawwenda via the installation package for your environment, if a suitable one exists for download. This also takes care of installing dependencies and doing preparation (unless mentioned otherwise in the installation procedure). It is possible (and not hard) to use the bare Source Package, but beyond this documentation.

For real usage it is highly recommended to host Lawwenda in a real web server. This makes use of the *wsgi* interface, which is commonly used for hosting Python based web application. You can skip this for now at come back somewhat later if you just want to try it out, and make the *First Steps*.

The exact steps for adding a wsgi application to a web server depend on the daemon that is used. Please read the documentation of your web server.

You will need to specify the location of a wsgi script during configuration. Create this file in a place that is convenient for you and fill it with the content that is printed by this command line:

```
lawwenda_cli generate_wsgi
```

For example, the steps for Apache 2.4 are roughly the following:

- Install and enable *mod_wsgi*.

- Add a snippet like this inside some *VirtualHost* in your Apache configuration:

```
WSGIScriptAlias /shares /srv/lawwenda/lawwenda.wsgi
<Directory /srv/lawwenda>
    Require all granted
</Directory>
```

The */shares* path is the path segment to append to the VirtualHost root url in order to reach Lawwenda. That url might then be *https://example.com/shares*. Note that this url will not return a useful answer. This is okay, the documentation will explain why.

The */srv/lawwenda/lawwenda.wsgi* path (and its parent path in *Directory*) can be chosen freely. This file will be created in the next step. The following assumes the paths as in the snippet.

- Execute this commands on a terminal:

```
mkdir -p /srv/lawwenda
lawwenda_cli generate_wsgi > /srv/lawwenda/lawwenda.wsgi
```

- Adapt as needed to match your security requirements. :)

- Restart Apache.

Note: The web server must be privileged to access the directories that you are going to share.